

C L A I M S

1. A posterior vertebral support assembly (1), comprising an interspinous wedge (5) configured to be
5 inserted between the spinous processes (9) of two vertebrae (2) to be treated, whereof at least the zone designed to be placed between the spinous processes of the vertebrae is made of an elastically deformable material;

10 an assembly (1) characterized in that it comprises:

- two compressive lateral elements (6), designed to be placed on either side of the wedge (5) in the longitudinal direction, the compressive lateral elements (6) being deformable between releasing positions, which
15 they occupy when the vertebrae (2) are in lordosis or when the spinal column is extended, and wherein they are relatively spaced apart from the wedge (5) in the transverse direction, and compressive positions, which they occupy when the spinal column is in flexion, and
20 wherein they are relatively close to the wedge (5) in the transverse direction; and

- two lateral transmission elements (7), placed between the compressive lateral elements (6) and the wedge (5), configured in order, when the compressive
25 lateral elements (6) are displaced in said compressive position, to press against the wedge (5) in the transverse direction thereof, at the zone (10) of the wedge (5) designed to be placed between the spinous processes (9) of the vertebrae (2).

30 2. A support assembly (1) according to claim 1, characterized in that the material constituting the zone of the wedge (5) designed to be placed between the spinous processes has a limit of compressibility in the transverse direction of the wedge (5), and in that the

assembly (1) is configured such that this limit is reached when the treated vertebrae (2) attain a predetermined tilted position.

3. A support assembly (1) according to claim 1 or
5 claim 2, characterized in that the compressive lateral elements (6) are configured so as to have a limit of deformation in the transverse direction, this limit of deformation being reached when the treated vertebrae (2) attain a predetermined tilted position.

10 4. A support assembly (1) according to any one of claims 1 to 3, characterized in that the compressive lateral elements (6) are configured so as to be elastically deformable between said releasing and compressive positions.

15 5. A support assembly (1) according to any one of claims 1 to 4, characterized in that the compressive lateral elements (6) are configured so as to be elastically deformable in the longitudinal direction of the compressive lateral elements (6).

20 6. A support assembly (1) according to any one of claims 1 to 5, characterised in that the compressive lateral elements (6) are independent of one another, and in that each is connected to one of the treated vertebrae (2) by one end and to the other treated vertebra (2) by
25 its other end.

7. A support assembly (1) according to claim 6, characterised in that the compressive lateral elements (6) comprise eyelets (16) or anchorage pieces designed to receive pedicular anchorage screws for anchoring the
30 compressive lateral elements (6) to the vertebrae (2).

8. A support assembly (1) according to any one of claims 1 to 5, characterized in that the compressive lateral elements are configured so as to be able to pass beneath the laminae of the overlying vertebra.

9. A support assembly (1) according to any one of claims 1 to 5, characterized in that the compressive lateral elements are configured so as to be able to be connected to an interpedicular transverse connecting bar, placed in position on the underlying vertebra especially in the case of laminectomy.

10. A support assembly (1) according to any one of claims 1 to 5, characterized in that the compressive lateral elements are configured so as to be able to be connected to a connecting bar joined to a system of arthrodesis of the two underlying vertebrae.

11. A support assembly (1) according to any one of claims 1 to 5, characterized in that the compressive lateral elements (6) are formed by the two lateral portions of a circular strap (25) engaged round the spinous processes (9) of the two treated vertebrae (2).

12. A support assembly (1) according to any one of claims 1 to 11, characterized in that the lateral transmission elements (7) are constituted by small bars (2) bearing on the one hand against the compressive lateral elements (6) and on the other hand against the wedge (5).

13. A support assembly (1) according to any one of claims 1 to 11, characterized in that the lateral transmission elements (7) are constituted by bosses (30) connected either to the compressive lateral elements (6) or to the wedge (5).